

Title (en)

Method and apparatus of reducing the force required to separate a solidified object from a substrate

Title (de)

Verfahren und Vorrichtung zur Reduktion der erforderlichen Kraft zur Trennung eines festen Objekts von einem Substrat

Title (fr)

Procédé et dispositif de réduction de la force nécessaire pour séparer un objet solidifié d'un substrat

Publication

EP 2241430 A1 20101020 (EN)

Application

EP 09011099 A 20090828

Priority

US 42350009 A 20090414

Abstract (en)

A method and apparatus for making a three-dimensional object from a solidifiable material such as a photopolymer is shown and described. In accordance with the method, positions relative to a build axis are subdivided into first and second exposure data subsets, and the first and second exposure data subsets are solidified in alternating sequences to reduce the surface area of solidified material in contact with a solidification substrate.

IPC 8 full level

B29C 67/00 (2006.01)

CPC (source: EP US)

B29C 64/393 (2017.07 - EP US); **B33Y 10/00** (2014.12 - EP US); **B33Y 30/00** (2014.12 - EP US); **B33Y 50/02** (2014.12 - US); **B29C 33/68** (2013.01 - EP US)

Citation (applicant)

- US 27342808 A 20081118
- US 2008169589 A1 20080717 - SPERRY CHARLES R [US], et al
- US 2008169586 A1 20080717 - HULL CHARLES W [US], et al

Citation (search report)

- [PX] EP 2067608 A1 20090610 - SONY CORP [JP]
- [X] JP 2004122501 A 20040422 - FUJI PHOTO FILM CO LTD
- [A] US 2007260349 A1 20071108 - JOHN HENDRIK [DE], et al
- [A] EP 2011631 A1 20090107 - ENVISIONTEC GMBH [DE]
- [A] US 2005058837 A1 20050317 - FARNWORTH WARREN M [US], et al

Cited by

CN110121406A; CZ306289B6; RU2726524C2; US11981056B2; US11623396B2; US11034080B2; US11267196B2; GB201917012D0; EP4070955A4; JP2020505252A; WO2018133883A1; WO2017100811A1; WO2019175729A1; EP3390004B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2241430 A1 20101020; **EP 2241430 B1 20121114**; EP 2419258 A2 20120222; US 2010262272 A1 20101014; US 8326024 B2 20121204; WO 2010120839 A2 20101021; WO 2010120839 A3 20110901; WO 2010120839 A9 20101202

DOCDB simple family (application)

EP 09011099 A 20090828; EP 10717929 A 20100414; US 2010030976 W 20100414; US 42350009 A 20090414